IN THE CLAIMS

1. - 4. (Canceled)

5. (Currently Amended) A manufacturing method for an electron source ~~including~~ composed of a plurality of electron-emitting devices, ~~formed on a substrate, in~~ each of which emits electrons from an electron-emitting member ~~including a plurality of carbon fibers is capable of emitting electrons when~~ by applying a driving voltage ~~is applied~~ between a cathode electrode ~~on which~~ having the electron-emitting member ~~is formed~~ and a counter electrode disposed in opposition to the cathode electrode, the method comprising the steps of:

(A) preparing a plurality of cathode electrodes each having an electron-emitting member, ~~including a plurality of carbon fibers~~ and a counter electrode ~~to be~~ opposed to the plurality of cathode electrodes; and

(B) increasing an applying [[a]] voltage ~~higher than the driving voltage~~ that is applied between the counter electrode and ~~each of~~ a first cathode electrode[[s]] ~~to cause an I-V characteristic of the~~ having a first electron-emitting member in the cathode electrodes, ~~and an I-V characteristic of a second electron-emitting member to become closer to each other, the first electron-emitting member being operative to emit a relatively larger number of electrons when a predetermined voltage is applied, the second electron-emitting member being operative to emit a relatively smaller number of electrons when the predetermined voltage is applied~~ across a voltage above which an absolute value

of an inclination in F-N plots of an electron-emitting characteristic of the first electron-emitting member decreases,

in order to reduce a difference of (i) an electron-emitting characteristic of a second electron-emitting member being operative to emit a relatively greater number of electrons when a predetermined voltage is applied between a second cathode electrode having the second electron-emitting member in the cathode electrodes and the counter electrode and (ii) the electron-emitting characteristic of the first electron-emitting member being operative to emit a relatively lesser number of electrons when the predetermined voltage is applied between the first cathode electrode and the counter electrode.

6. (Currently Amended) A manufacturing method for the electron source according to claim 5, wherein ~~each of the plurality of carbon fibers is one kind selected from among a plurality of carbon nanotubes, a plurality of graphite nanofibers and a mixed plurality of carbon nanotubes and graphite nanofibers~~ the electron-emitting member includes a carbon fiber.

7. - 9. (Canceled)

10. (New) A manufacturing method for the electron source according to claim 6, wherein the carbon fiber is a carbon nanotube and/or a graphite nanofiber.

11. (New) A manufacturing method for the electron source according to claim 5, wherein a maximum voltage of the applying voltage is greater than the driving voltage.

12. (New) A manufacturing method for an image display apparatus composed of an electron source and a luminescent material film, wherein said electron source is manufactured by the manufacturing method according to claim 5.

13. (New) A manufacturing method for an electron-emitting device composed of a cathode electrode and a counter electrode disposed in opposition to the cathode electrode, comprising the steps of:

(A) preparing a cathode electrode and a counter electrode that is opposed to the cathode electrode; and

(B) increasing an applying voltage that is applied between the cathode electrode and the counter electrode across a voltage above which an absolute value of an inclination in F-N plots of an electron-emitting characteristic decreases.

14. (New) A manufacturing method for the electron-emitting device according to claim 13, wherein a maximum voltage of the applying voltage is higher than a driving voltage of the electron-emitting device.

15. (New) A manufacturing method for the electron-emitting device according to claim 13, further comprising a step of preparing an electron-emitting member including a carbon fiber on the electron-emitting member.

16. (New) A manufacturing method for the electron-emitting device according to claim 15, wherein the carbon fiber is a carbon nanotube and/or a graphite nanofiber.

17. (New) A manufacturing method for an image display apparatus composed of an electron-emitting device and a luminescent material film, wherein said electron-emitting device is manufactured by the manufacturing method according to claim 13.

18. (New) A characteristic adjusting method for adjusting an electron-emitting characteristic of an electron-emitting device composed of a cathode electrode having a plurality of carbon fibers and a counter electrode disposed in opposition to the cathode electrode, comprising the step of:

increasing an applying voltage that is applied between the cathode electrode and the counter electrode across a voltage above which an absolute value of an inclination in F-N plots of an electron-emitting characteristic decreases.

19. (New) A characteristic adjusting method for an image display apparatus composed of an electron-emitting device and a luminescent material film, wherein the electron-emitting characteristic of said electron-emitting device is adjusted by the characteristic adjusting method according to claim 18.

20. (New) An image display apparatus having (i) a plurality of electron-emitting devices each of which emits electrons from an electron-emitting member by applying a driving voltage between a cathode electrode having the electron-emitting member composed of a plurality of carbon fibers and a counter electrode disposed in opposition to the cathode electrode and (ii) a luminescent material film, wherein said image display apparatus is manufactured by the manufacturing method according to claim 12.

21. (New) An image display apparatus having (i) a plurality of electron-emitting devices each emits electrons from an electron-emitting member by applying a driving voltage between a cathode electrode having the electron-emitting member composed of a plurality of carbon fibers and a counter electrode disposed in opposition to the cathode electrode and (ii) a luminescent material film, wherein said image display apparatus is manufactured by the manufacturing method according to claim 17.

22. (New) A manufacturing method for an electron source composed of a plurality of electron-emitting devices, each of which emits electrons from an electron-emitting member by applying a driving voltage between a cathode electrode

having the electron-emitting member and a counter electrode disposed in opposition to the cathode electrode, comprising the steps of:

(A) preparing a plurality of cathode electrodes each having an electron-emitting member, and a plurality of counter electrodes that are respectively opposed to the plurality of cathode electrodes; and

(B) increasing an applying voltage that is applied between a first cathode electrode having a first electron-emitting member in the cathode electrodes and a first counter electrode opposed to the first cathode electrode in the counter electrodes, across a voltage above which an absolute value of an inclination in F-N plots of an electron-emitting characteristic of the first electron-emitting member decreases, in order to reduce a difference of (i) an electron-emitting characteristic of a second electron-emitting member being operative to emit a relatively greater number of electrons when a predetermined voltage is applied between a second cathode electrode having the second electron-emitting member in the cathode electrodes and a second counter electrode opposed to the second cathode electrode, different from the first counter electrode in the counter electrodes and (ii) the electron-emitting characteristic of the first electron-emitting member being operative to emit a relatively lesser number of electrons when the predetermined voltage is applied between the first cathode electrode and the first counter electrode.

23. (New) A manufacturing method for the electron source according to claim 22, wherein the electron-emitting member includes a carbon fiber.

24. (New) A manufacturing method for the electron source according to claim 23, wherein the carbon fiber is a carbon nanotube and/or a graphite nanofiber.

25. (New) A manufacturing method for the electron source according to claim 22, wherein a maximum voltage of the applying voltage is higher than the driving voltage.

26. (New) A manufacturing method for an image display apparatus composed of an electron source and a luminescent material film, wherein said electron source is manufactured by the manufacturing method according to claim 22.